

## LYME DISEASE

Lyme disease, caused by the spirochete *Borrelia burgdorferi*, is transmitted by the bite of *Ixodes* ticks. The acute phase of the illness is characterized by erythema migrans (EM), a red circular patch that usually appears 3 days to 1 month after the bite of an infected tick, at the site of the bite, and is accompanied by mild systemic symptoms. EM occurs in 60%-80% of the patients. The chronic phase may occur within weeks to months after the initial infection and consists of arthritic, cardiac or neurologic manifestations.

### **Laboratory Criteria for Confirmation:**

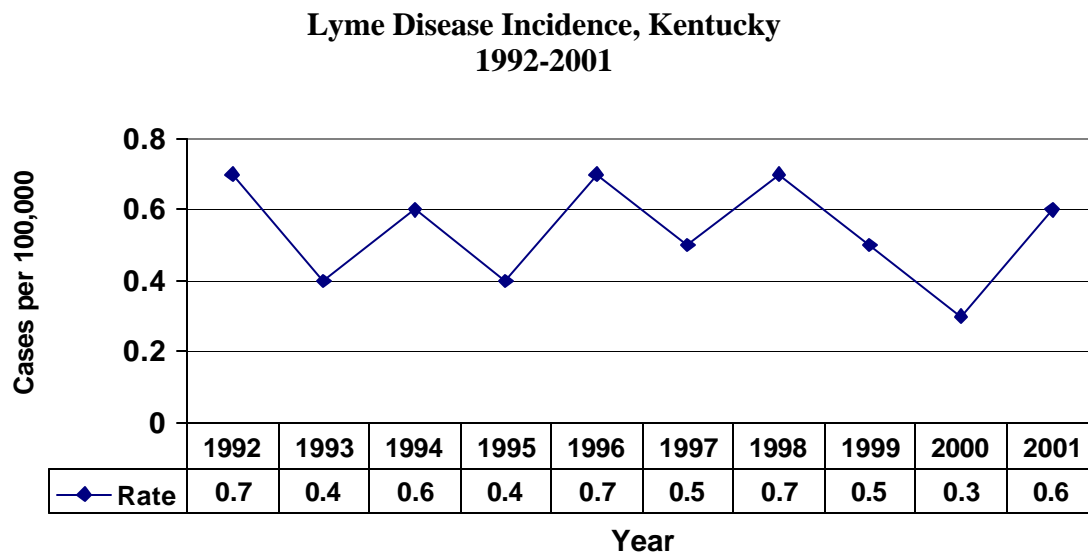
- ?? Isolation of *B. burgdorferi* from a clinical specimen, **OR**
- ?? Demonstration of diagnostic IgM or IgG antibodies to *B. burgdorferi* in serum or CSF. A two-step testing approach using a sensitive enzyme immunoassay (EIA) or immunofluorescent assay (IFA) followed by Western Blot is required.

### **Case Classification**

*Confirmed:* a) A case with erythema migrans or b) a case with at least one late manifestation that is laboratory confirmed.

### **Comment**

See the complete surveillance case definition on the back of the CDC Lyme Disease Report Form in the Appendix.

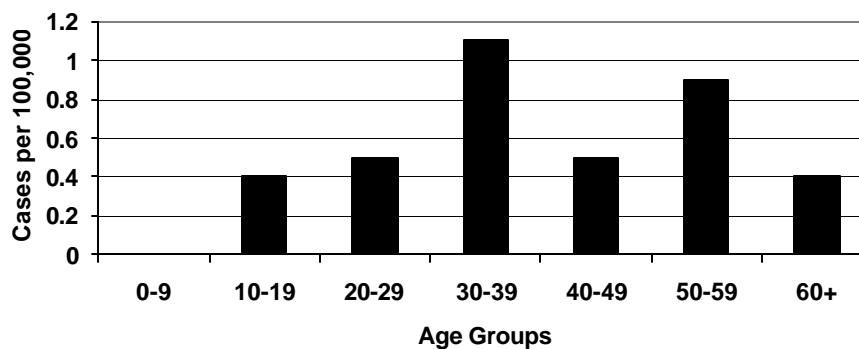


## Epidemiology

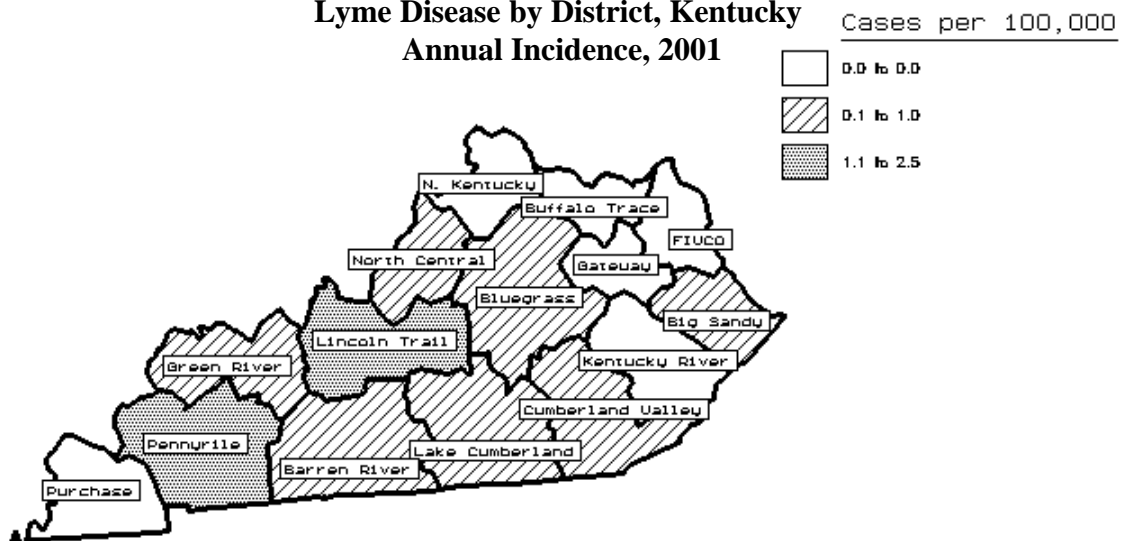
Kentucky 2001	Rate per 100,000	U. S. Rate (2000) per 100,000
Cases 23	0.6	6.53

Cases by Gender	Rate per 100,000
Female 15	0.7
Male 8	0.4

**Lyme Disease, Age-Specific Incidence  
Kentucky, 2001**



**Lyme Disease by District, Kentucky  
Annual Incidence, 2001**



The Lincoln Trail District reported the highest incidence at 2.5 cases per 100,000, followed by Pennyrile with 1.9 cases per 100,000.

Fourteen of the 23 cases reported onset dates in June and July.